

Work Order ID 117798

May-05-14 8:00:28 AM

\*117798\*

Page 1

Item ID: D4934-041

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Blade Assembly

Start Date: 5/05/14

Start Qty: 10.00

\*10\*

Cust Item ID:

Required Date: 5/19/14

Req'd Qty: 10.00

\*10\*

Customer:

Reference:

Approvals:

Process Plan: MJS

Date: 14-05-05

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D4934

A

110

Weld per dwg A/R Steel rod Batch: 119317

0.00

\*110\*

Large Fab

Memo

0.00

Large Fab

Clean with wash & wipe to remove oil

120

QC9- Inspect visual per QSI004- Fusion Welds

0.00

\*120\*

QC

Memo

0.00

Quality Control

130

QC5- Inspect part completeness to step on W/O

0.00

\*130\*

QC

Memo

0.00

Quality Control

VERIFY TENSILE STRENGTH AFTER WELDING AS PER DWG NOTE 8

DAS  
50  
9-89

DAS  
9  
9-89

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Page 2

Item ID: D4934-041 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Blade Assembly  
 Start Date: 5/05/14 Start Qty: 10.00 \*10\* Cust Item ID:  
 Required Date: 5/19/14 Req'd Qty: 10.00 \*10\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140 *140* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.2) per QSI005 4.3-Steel <i>M 138981</i> Memo ***MASK CARBIDE FACE PRIOR TO POWDERCOAT*** START TIME: <i>12:00</i> OVEN TEMPERATURE: <i>150</i> FINISH TIME: <i>12:30</i>	0.00 0.00				<i>10</i>	<i>0</i>	<i>14-8-3</i>	<i>DAS 34 989</i>
150 *150* QC Quality Control	QC3- Inspect Part Finish  Memo	0.00 0.00				<i>5</i>	<i>13</i>	<i>14-9-3</i>	<i>DAS 38 9-89</i>
160 *160* Packaging Packaging	Identify as per dwg & Stock Location: _____  Memo <i>5798</i>	0.00 0.00				<i>5</i>	<i>14/9/3</i>	<i>C</i>	

Work Order ID 117798

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Item ID: D4934-041 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Blade Assembly  
 Start Date: 5/05/14 Start Qty: 10.00 \*10\* Cust Item ID:  
 Required Date: 5/19/14 Req'd Qty: 10.00 \*10\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	QC21- Final Inspection - Work Order Release	0.00							
*170*									
QC	Memo	0.00							
Quality Control									

MLG 14-09-03

MF  
14-9-03

# Picklist Print

May-05-14 8:00:51 AM

Page 1

Work Order ID: 117798

**\*117798\***

Parent Item: D4934-041

**\*D4934-041\***

Parent Item Name: Blade Assembly

Start Date: 5/05/14

Required Date: 5/19/14

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP REV:A 13.09.06 new issue DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2741-NP		Manufactured	No				Each	0.0000		10			
<b>*D2741-NP*</b>													
Blade (No paint)					117185			5	**				14-08-29 JBL
D4932-1-048		Manufactured	No		117791		Each	5		10			
<b>*D4932-1-048*</b>													
KWS Carbide Wear Strip, 4.8" Long					117743			10	**				14-08-29 JBL



DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

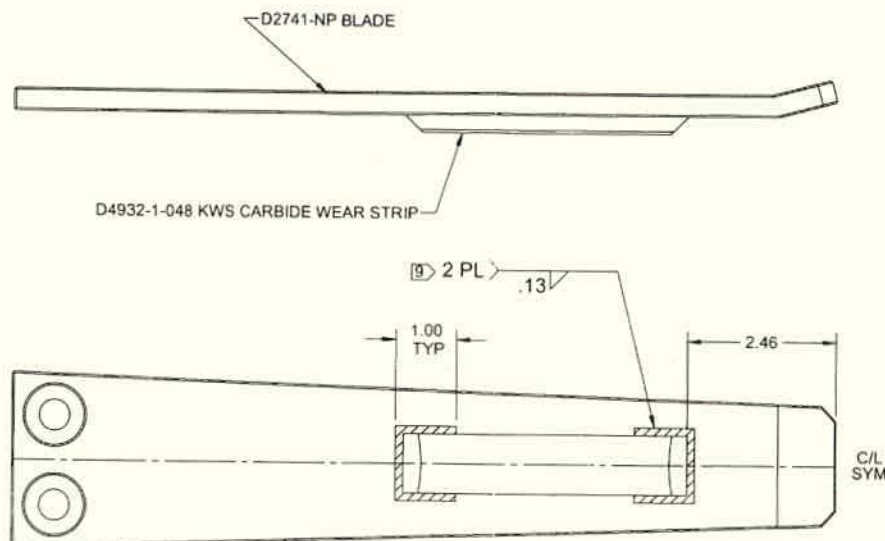
Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence
		<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4934-041	BLADE ASSY
1	1	D2741-NP	BLADE
2	1	D4932-1-048	KWS CARBIDE WEAR STRIP



**D4934-041 BLADE ASSY**

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT "WHITE" PER DART QSI 005 4.3.5.2 (EXCEPT FOR CARBIDE FACE)
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.030 TO 0.060 MAX
- 6) IDENTIFICATION: WITH DART P/N "D4934-041" PER DART QSI 044 METHOD 6.1
- 7) WEIGHT: 4.12 LBS
- 8) VERIFY TENSILE STRENGTH (AFTER WELDING) BY HARDNESS TEST PER ASTM E18 TO 34-40 HRC
- 9) WELDING: PER QSI 004

A	NEW ISSUE	DB	13.08.28
REV.	DESCRIPTION	BY	DATE
DESIGN	DB	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	DB		
CHECKED	AP	DRAWING NO.	REV. A
MFG. APPR.	AP	D4934	SHEET 1 OF 1
APPROVED	AP	TITLE	SCALE
DE APPR.	AP	BLADE	NTS
DATE	13.08.28	<small>COPYRIGHT © 2015 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

**RELEASED**  
2014-04-04  
MJD

117798 MJS  
140505

[9:16:08 AM] Linda Lacelle: hi Mike, the D4934 blades with the welded carbide strips...do they still need to be masked?

[9:31:56 AM] Mike Petsche: I don't think so

[9:40:18 AM] Linda Lacelle: so is that a no? the drwg says to mask

[9:42:33 AM] Mike Petsche: I'm pretty sure we deviated them last time to nix the masking

[9:45:08 AM] Linda Lacelle: ok..thx

Mike Petsche